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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,338

02/24/2004

Young-Ju Kang

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EXAMINER

TALBOT, BRIAN K

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

01/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/785,338	Applicant(s) KANG ET AL.	
	Examiner Brian K. Talbot	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The amendment filed 10/01/08 has been considered and entered. Claims 1-25 remain in the application.

2. This application contains claims 18-25 drawn to an invention nonelected with traverse in the reply filed on 3/19/08. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. In light of the amendment filed 10/1/08, the 35 USC 112 second paragraph rejections as well as the 35 USC 102 rejections have been withdrawn. The 35 USC 112 first paragraph rejection and the 35 USC 103 rejections have been maintained.

Claim Rejections - 35 USC § 112

5. Claims 7 and 10-17 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Process steps for forming the optical fiber preform by a MCVD process is not disclosed and is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Claim Rejections - 35 USC § 103

Claims 1-3,5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tankala (6,578,387) in combination with Walczak (2003/0221459).

Tankala (6,578,387) teaches a method of fabrication of rare earth doped preforms for optical fibers. Tankala (6,578,387) teaches a silica soot deposited as a layer on the inside surface of a silica-based tube by MCVD. The silica soot is immersed in a rare earth solution for doping and then treated with a chlorine gas in an inert atmosphere at elevated temperatures (abstract). The chlorine/inert gas treatment is performed at 600°C-1200°C to dry the silica soot, i.e. remove water (dehydrate) (col. 2, lines 55-65). A sintering step of 1800°C-2000°C is performed. A flame unit is utilized to form the soot with a moving torch (see Figs. 1-4).

Tankala (6,578,387) fails to teach that the chlorine drying gas is preheated prior to entering the tube.

Walczak (2003/0221459) teaches a forming a optical waveguide fiber perform whereby a silica soot is applied to the innerside of a silica tube and dried with a chlorine gas. The chlorine gas may be heated prior to entering the furnace.

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Tankala (6,578,387) process by preheating the chlorine/inert drying gas prior to entering the tube as evidenced by Walczak (2003/0221459) with the expectation of achieving a more efficient drying process.

Regarding claim 6, the claims recite a heatproof plate to protect instruments from being heated. While the Examiner acknowledges the fact that the prior art is silent with respect to this

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limitation, it is the Examiner's position that it would have been within the skill of one practicing in the art to utilize a heatproof plate if so desired for the advantages associated with its use, i.e. protecting sensitive components.

Claims 4 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tankala (6,578,387) in combination with Walczak (2003/0221459) further in combination with Sen (6,889,528).

Features detailed above concerning Tankala (6,578,387) in combination with Walczak (2003/0221459) are incorporated here.

Tankala (6,578,387) in combination with Walczak (2003/0221459) fail to teach using a lathe.

Sen (6,889,528) teaches a silica soot deposited as a layer on the inside surface of a silica-based tube by MCVD. The silica soot is immersed in a rare earth solution for doping and then treated with a chlorine gas in an inert atmosphere at elevated temperatures (abstract). The chlorine/inert gas treatment is performed at 600°C-1200°C to dry the silica soot, i.e. remove water (dehydrate). A sintering step of 1800°C-2000°C is performed. A flame unit is utilized to form the soot with a moving torch. A lathe is utilized in the manufacturing process (col. 1, line 23 – col. 6, line 25).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Tankala (6,578,387) in combination with Walczak (2003/0221459) process by utilizing a lathe as evidenced by Sen (6,889,528) with the expectation of achieving similar success.

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Regarding claims 12 and 15 the claims recite a heatproof plate to protect instruments from being heated. While the Examiner acknowledges the fact that the prior art is silent with respect to this limitation, it is the Examiner's position that it would have been within the skill of one practicing in the art to utilize a heatproof plate if so desired for the advantages associated with its use, i.e. protecting sensitive components.

Response to Amendment

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that the prior art, specifically Walczak (2003/0221459) teaches a OVD and not a MCVD and therefore would not be properly combineable.

The Examiner disagrees. The reference to Walczak (2003/0221459) is relied upon for teaching conventionality of "preheating" the dehydrating gas for treating a silica soot for manufacturing a silica optical waveguide fiber and not for the specific CVD process. One skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar success, improved drying/dehydrating process, with a preheated gas vs. a non-preheated gas as taught by Walczak (2003/0221459) as both the reference and the instant claims are directed toward the same filed of endeavor.

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian K Talbot/
Primary Examiner, Art Unit 1792

BKT